

The lateral fins were a good deal folded and the epidermis had become detached from the body-wall, so that it was not possible to ascertain the exact boundaries of the fins; the rays were very inconspicuous.

XXXVI.—On some new Species of the Coleopterous Genus *Mimela*. By GILBERT J. ARROW.

THE species of this brilliant genus of Rutelidæ, although ranging as far as Japan and Java, appear to flourish to a special and remarkable degree in the eastern part of the Himalayan region, Burma, and Tonkin. Half the fifty described species are inhabitants of that region, and eight more are here described from the same part, all of them contained in the British Museum collection. One from Western and another from Eastern China have been added.

*Mimela lævigata*, sp. n.

Læte viridi-metallica, nitida, supra paulo magis aureo-viridis, elytrorum sutura angustissime violacea; capite irregulariter punctato, prothoracis et elytrorum lateribus grosse punctatis, supra fere lævigatis, pygidio fere lævi, punctis nonnullis marginalibus, corpore subtus glabro, metasterni lateribus solum crebre punctatis; mesosterno sat longe producto, haud acuto, tibiis anticis extus sinuatis, haud dentatis.

Long. 21–22 mm.; lat. max. 12 mm.

*Hab.* Sikkim (*Sir J. D. Hooker*); Mungphu (*E. Atkinson*).

Entirely bright metallic green, with the upper surface rather more golden green and the extreme edge of the elytral suture violet. It is a large species, of elongate oval form and almost devoid of hairy clothing. The head is irregularly punctured, the clypeus rugosely. The pronotum is scarcely visibly punctured on its disk, but strongly and confluent at the sides. The scutellum is short and smooth. The elytra are almost without punctures on the inner half, but very strongly and irregularly punctured on the outer half, and the pygidium is very smooth, only exhibiting a few punctures near its circumference. The prosternal process is broad and triangular at the summit, and the mesosternal process is moderately long but rather blunt. The front tibiæ are without a lateral tooth in either sex.

Our collection contains one specimen of each sex.

*Mimela marginalis*, sp. n.

Saturate viridis, haud metallica, antennis, clypeo, pedibus, abdominis extremitate supra et subtus, prothoracis et elytrorum marginibusque externis flavibus, plus minusve viriditinctis, corpore subtus fusco-æneo; corpore supra tenuiter minute punctato, clypeo subtiliter rugoso; mesosterno paulo producto sat acuto, tibiis anticis bidentatis.

Long. 19-23 mm.; lat. max. 12-13 mm.

*Hab.* Allahabad, Mungphu, Bhotan.

Deep non-metallic green, with the antennæ, clypeus, legs, the hind margins of the propygidium and pygidium, the outer margins of the pronotum and elytra, and usually the extremity of the abdomen beneath testaceous, more or less suffused with metallic green. The body is oval, very smooth, very lightly punctured above and thinly clothed at the sides beneath with greyish hairs. The clypeus is finely rugose, the forehead, pronotum, and scutellum minutely and sparingly punctured. The elytra are finely and rather irregularly punctured, with a complete line of punctures upon each adjoining the suture, and a few other imperfect lines. The pygidium is rather more coarsely but not deeply punctured. The antennæ are long, the mesosternal process is short but rather slender and acute, and the front tibiæ are bidentate, the apical tooth being blunt and long and the lateral one short and rather sharp. The inner claw of the front tarsus is rather widely cleft.

♀. The terminal tooth of the front tibia is very long.

*M. marginalis* is most nearly related to the Ceylon species *M. mundissima*, Walker, but is larger, more elongate, and has a less sharply defined marginal yellow band. In the Ceylonese species the mesosternal process is not produced and the front tibiæ are not distinctly bidentate. It, again, is closely allied to the S.-Indian *M. xanthorrhina*, Hope, which differs in its paler green colour, less definite marginal band, and more strongly sculptured elytra.

*Mimela amabilis*, sp. n.

Saturate viridis, supra haud metallica, corpore subtus pedibusque metallicis, antennis fere nigris; corpore convexo, subgloboso, supra sat lævi, subtiliter punctato; mesosterno angulato, sed ultra coxas medias haud producto, tibiis anticis fœminæ distincte, maris vix bidentatis.

Long. 15-16 mm.; lat. max. 9.5 mm.

*Hab.* Burma, Karen Hills; Siam, Renong (*Doherty*).

Deep green, with the legs and lower surface metallic, and the upper surface non-metallic but with a very faint rosy reflection, generally visible at least in the anterior part. The head and prothorax are finely and rather closely punctured, the clypeus almost rugosely. The scutellum has a few very minute punctures and the elytra are lightly and thinly punctured, in rows, the subsutural interstice being irregularly punctured. The pygidium is finely punctured—a little more strongly at the sides. The mesosternum is not produced in front of the coxæ.

♂. The front tibia has a rather long blunt apical tooth, but only a vestige of a lateral one.

♀. The front tibia is distinctly bidentate.

This species is very closely related to *M. downesi*, Hope, but that is almost entirely devoid of puncturation upon the upper surface.

*Mimela ohausi*, sp. n.

Læte viridi-metallica, capitis medio, pronoto utrinque, elytri utriusque vitta externa aliaque media, femorum 4 posteriorum medio, segmentorum abdominalium lateribus pygidiique apice igneorufis, scutello cœruleo; capite crebre rugoso, postice fortiter punctato, prothorace, scutello, elytris pygidioque leviter ac sparse punctulatis; mesosterno haud producto, tibiis anticis utriusque sexus fortiter bidentatis.

*Var.* tota violacea.

Long. 14.5 mm.; lat. max. 8 mm.

*Hab.* Assam, Tonkin, Yunnan.

Bright metallic green, with a deep blue scutellum and fiery-red patches on the head, each side of the pronotum, the end of the pygidium, the four posterior femora and the sides of the ventral segments, and a discoidal and lateral stripe on each elytron. It is a small species of elongate-oval shape. The head is closely and finely rugose in front and strongly punctured on the vertex, the pronotum and scutellum very thinly and minutely punctured and the former deeply channelled along the middle and rather inflated on each side. The elytra are very lightly punctured, some of the punctures forming double rows. The pygidium has a few moderately strong punctures. The prosternal process is narrow and not very prominent, and the mesosternum is not produced. The front tibiæ are strongly bidentate in both sexes.

In the female the apical tooth of the front tibia is longer and blunter and the club of the antenna rather shorter than in the male. The only female I have seen is a specimen of a deep violet colour in the collection of Dr. Ohaus.

This species very closely resembles *M. horsfieldi*, Hope, in its form, colouring, and puncturation, but is generally rather smaller. It is less regularly oval in shape, and the form of the prosternal process, mesosternum, and front tibiæ are quite different. In addition the eyes are larger, the head much more strongly sculptured, the pronotum has a deep median groove, and its sides are more convex and not strongly punctured.

*Mimela atkinsoni*, sp. n.

Parva, ovata, sat globosa, polita, omnino brunneo-ænea, corpore supra subtiliter punctato, clypeo paulo rugoso, prothorace sat angusto, æqualiter punctato, haud sulcato; pedibus brevibus, posticis crassis, tibiis anticis leviter bidentatis; mesosterno haud producto.

Long. 13 mm.; lat. max. 8 mm.

*Hab.* Pegu, Tenasserim.

Collected by the late E. T. Atkinson.

Very shining deep metallic olive-green above and below, except the antennæ, which are deep red. The form is oval, convex, and rather globular, the head relatively rather large, and the legs short, the hind legs very thick and the femora strongly arched. The clypeus is strongly and almost rugosely punctured, the forehead and prothorax rather closely, but a little less closely at the sides of the latter, the scutellum very sparingly. The elytra are minutely punctured in nearly regular longitudinal lines, of which the innermost are strongly impressed at the posterior margins. The pygidium is rather deeply but not closely punctured, the lower surface of the body almost smooth. The prosternum is large and the mesosternum not produced. The front tibiæ are bidentate, and the upper tooth is minute and obtuse in the male and rather more marked in the female.

In the type (♂) specimen the outer margins of the elytra have a rosy tint which I have not seen in others.

In colouring, sculpture, the compact form, and the structure of the hind legs *M. atkinsoni* very nearly approaches *M. excisipes*, Reitter, but it is smaller, more globose, and a little less strongly punctured, the sculpture of the sides of the pronotum in particular not being rugose.

There are specimens in the British Museum and in Dr. Ohaus's collection, all of them collected by the late E. T. Atkinson.

*Mimela subsericea*, sp. n.

Viridi-metallica, corpore subtus, pedibus antennisque æneo-testaceis, tarsis rufo-cupreis, corpore supra creberrime punctato, capitis antice pronotique marginibus lateralibus punctis confluentibus, aliis distinctis; mesosterno minutissime producto, coxas intermedias haud superante, processu prosternali lato, robusto; pedibus sat robustis, tibiis anticis haud acute bidentatis, antennis sat gracilibus.

Long. 14-15 mm.; lat. max. 8-9 mm.

*Hab.* Assam, Naga Hills (*Doherty*); Burma, Ruby Mines (*Doherty*), Mandalay (*Atkinson*).

Bright metallic green, with the lower surface and legs coppery testaceous and the tarsi more or less fiery-copper-coloured. The body is rather globose and the legs short and stout, and the whole upper surface is very strongly and densely punctured, but moderately shining. The punctures are confluent on the clypeus and at the sides of the head and pronotum. There is a straight line of punctures on each side of the elytral suture, leaving a quite smooth inner margin to each elytron, and slight traces of three or four other smooth longitudinal lines upon each. The pygidium is strongly but less densely punctured. The prosternal process is rather broad, the mesosternal process pointed but not produced, and the front tibia has a very long blunt terminal tooth and a slight upper tooth.

This species is nearly allied to the succeeding one (*M. soror*), but smaller and more densely punctured, except upon the pygidium, which is smoother and more shining. The mesosternum is not distinctly produced as in that species, and the hind angles of the pronotum are much more rounded.

It is represented in the British Museum and in Dr. Ohaus's Collection.

*Mimela soror*, sp. n.

Læte viridi-metallica, pygidii lateribus nonnihil, corpore subtus pedibusque testaceo-dilutis, ore antennisque flavis; corpore supra toto dense punctato, clypeo rugoso; processu mesosternali minuto, acuto, tibiis anticis haud acute bidentatis, antennis gracilibus.

Long. 19-20 mm.; lat. max. 10·5-11·5 mm.

*Hab.* N. India, Manipur (*Doherty*).

This species is metallic green above and the antennæ, legs, and lower surface are ferruginous and more or less suffused with green. A small pale patch is vaguely traceable on each side of the pygidium in certain lights. The form is oval and

convex. The clypeus is broad and coarsely rugose, the forehead strongly punctured, the pronotum coarsely and densely at the sides and a little more finely in the middle, the scutellum very minutely and the elytra densely and irregularly, leaving only a narrow smooth sutural strip and slight vestiges of two or three others upon each. The pygidium is strongly and thickly punctured, the punctures becoming confluent at the sides, and the lower surface of the body is smooth in the middle and rugose and hairy at the sides. The mesosternal process is very short but sharp, and the front tibiæ (in the female) have a long blunt terminal tooth and a feeble upper one.

It is very closely related to *M. chrysoprasa*, Hope, of Borneo and the Malay Peninsula, but a little smaller, with the prothorax rather less strongly punctured, the scutellum more minutely, the pygidium punctured instead of finely granulated, and the femora and tibiæ of a rather darker shade.

The two females in the British Museum were collected by the late W. Doherty.

*Mimela pyriformis*, sp. n.

Viridi-metallica, corporis supra marginibus externis omnibus anguste flavescentibus, corpore subtus, pedibus antennisque testaceis leviter viridi-micantibus; corpore supra densissime punctato, pygidio minute granulato et setoso, elytris postice dilatatis; processu mesosternali acutissimo, tibiis anticis bidentatis, dente superiore minuto, acuto.

Long. 23 mm.; lat. max. 14 mm.

*Hab.* Assam, Naga Hills.

This insect has a peculiar pear-shaped outline, producing an approximation to the curious form of *M. sericea*, Ohaus, but it is larger and more convex and much less opaque.

It is metallic green, slightly shining, with the outer margins of the clypeus, prothorax, and elytra, the lower surface, legs, and antennæ testaceous, with a greenish reflection. The head is rugosely punctured, the punctures almost obliterated upon the clypeus; the pronotum is very densely punctured, the scutellum moderately, the elytra densely and uniformly, with a smooth juxta-sutural line and an almost obliterated dorsal one. The outer edges of the elytra are nearly straight and diverge slightly for almost their whole length, so that their greatest breadth is very little before the extremity. They are long and slope rather gradually at the hinder part. The pygidium is short and broad, finely granulated and

thinly pubescent. The mesosternal process is small but acutely produced. The front tibiæ are distinctly bidentate and the antennæ slender.

There are two male specimens in the British Museum, one of them collected by the late E. T. Atkinson and the other by Col. W. F. Badgley.

*Mimela oblonga*, sp. n.

Elongata, convexa, læte olivaceo-viridis, clypeo, prothoracis lateribus pygidiique lateribus postice pallidioribus atque metallicis; sat crebre haud grosse punctata, clypeo, prothoracis marginibus pygidioque rugosis; corpore subtus sat dense hirto, cum femoribus testaceo, abdomine cuprascente, tibiis brunneis, tarsis nigris; mesosterno haud producto, tibiis anticis obtuse bidentatis.

Long. 21 mm.; lat. max. 12 mm.

*Hab.* Sze-chuen, Chin-fu-san.

Four specimens (all females) have been sent to us by the Rev. Wilfred A. Maw.

Light olivaceous green, with the clypeus, the lateral margins of the pronotum, and the posterior part of the sides of the pygidium pale and metallic, the femora and breast testaceous, the abdomen more or less dark coppery, the tibiæ brown, and the tarsi black. It is strongly convex, shining, and elongate, with the sides subparallel, and the breast and the sides of the abdomen are thickly clothed with grey hair. The clypeus is coarsely rugose and rather straight in front, the forehead strongly punctured, the pronotum, scutellum, and elytra moderately finely but closely, the punctures becoming much coarser and confluent at the sides of the pronotum. The pygidium is coarsely rugose but slightly shining. The mesosternum is pointed but scarcely extends beyond the middle coxæ, and the front tibiæ are bluntly bidentate.

This species is very closely related to *M. passerinii*, Hope, and of the same colour and shape, but its smoother upper surface gives it a quite different appearance. The elytra are much more finely but moderately closely punctured, and the pygidium is rugose, but not so densely as in *M. passerinii*, and scarcely hairy. The prosternum also is blunter and scarcely produced.

*Mimela plicicollis*, sp. n.

Viridi-ænea, clypeo, pronoti lateribus elytrisque paulo dilutioribus, corpore subtus pedibusque cupreis; clypeo rugoso, fronte rugose

punctata, prothorace æqualiter et subtiliter punctato, medio profunde longitudinaliter sulcato, lateribus sat leviter arcuatis, postice plus minusve plicatis, elytris fortiter punctatis, lineis geminatis longitudinalibus postice impressis, pygidio grosse fere rugose punctato; mesosterno haud producto, tibiis anticis bidentatis.

Long. 13-15 mm.; lat. max. 8-9 mm.

*Hab.* E. China, Tientsin.

A considerable number of specimens were collected from April to June 1906 by Mr. F. M. Thomson.

It is nearly related to *M. specularis*, Ohaus, and *M. vittai-collis*, Burm., and the colour is that of the latter except that it is almost uniform above, only the clypeus, the lateral margins of the prothorax, and the elytra being a shade lighter. It is smaller than either of those species, and the curious corrugation of the posterior part of the sides of the prothorax distinguishes it at a glance from all. This corrugation is variable in its extent, but is almost invariably a very marked feature. The upper surface of the insect is strongly and closely punctured, except the prothorax and scutellum, of which the puncturation is fine. The pygidium is coarsely punctured and the sides of the body are thinly pubescent beneath. The mesosternum is pointed, but not produced beyond the coxæ, and the front tibiæ are bidentate in both sexes.

I printed in 1899 a few synonymical notes relating to *Mimela*. To these I may add the following:—

*M. lucidula*, Hope, and *lathamii*, Hope, belong to *M. splendens*, Gyll.

*M. glabra*, Hope, type, is a female of *M. downesi*, Hope.

*M. limbata*, Burm., and *M. pomacea*, Bates, are *M. passerinii*, Hope,

*M. coxalis*, Ohaus, is *M.* ("*Anomala*") *inscripta*, Nonf.

*M. pyroscelis*, Hope, is a species of *Anomala*.

XXXVII.—*Description of a new Elapine Snake of the Genus Apisthocalamus, Blgr., from New Guinea.* By G. A. BOULENGER, F.R.S.

*Apisthocalamus loennbergii.*

Snout short, broadly rounded. Rostral a little broader than deep, the portion visible from above measuring one